

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-19 are pending in the application, with claims 1, 3, 5, 9, 12 and 15 being the independent claims. No new claims are sought to be added. Claims 1, 3, 5, 9, 12, and 15 have been amended.

These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1, 3, 5-7, and 9-19 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent Application Publication No. 2001/0033611 A1 to Grimwood *et al.* ("Grimwood"). For the reasons set forth below, Applicants respectfully traverse.

Independent Claim 1

Independent claim 1 recites a method for *maintaining synchronization* in a communication system. The method comprising:

synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity;

transmitting a first signal using the first transmitter in the central entity to the one or more remote devices, wherein the first signal includes timing information based on the first symbol clock; and

upon termination of transmission of the first signal to the one or more remote devices, transmitting a second signal using the second transmitter in the central entity to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock.

Applicants maintain that Grimwood does not teach or suggest each and every feature of claim 1. For example, Grimwood does not teach or suggest *"synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity; upon termination of transmission of the first signal to the one or more remote devices, transmitting a second signal using the second transmitter in the central entity to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock."*

Transmission of a second signal, using a second transmitter, if and when the first signal is terminated facilitates maintaining synchronization even though there may be a loss of downstream signal. Having a redundant second transmitter in the central entity minimizes the need for re-ranging and the occurrence of poorly timed upstream bursts.

Grimwood teaches an apparatus and a method for synchronizing an upstream signal to a downstream signal with equal or different clock rates. The central unit of Grimwood generates a chip clock from a master clock and modulates downstream data using this chip clock (as opposed to synchronizing two symbol clocks) (Grimwood, paragraph [0048]). There is no second transmitter in Grimwood's central entity. The remote units (RU) of Grimwood use a master clock recovery to recover the master clock from the downstream signal. In RUs, upstream transmissions use a chip clock and upstream carrier derived from the recovered master clock signal (Grimwood, paragraphs [0049] and [0050]). Grimwood does this to avoid the need for an upstream clock recovery circuit (Grimwood, paragraph [0057], lines 6-8). Grimwood does not teach or suggest each and every feature of claim 1 for at least the following reasons.

First, the Examiner, on page 3 of the Office Action, states:

synchronizing a first symbol clock (CU master chip clock, paragraph [0004], page 1, line 7) and a second symbol clock (downstream chip clock, paragraph [0004], page 1,

line 6) (synchronizes the downstream and the upstream clocks, paragraph [0080], page 7, lines 1-2) in the central entity (upstream clock and downstream clock in a central unit CU, abstract, lines 2-4; Fig. 1, all clocks in both the RU and CU being synchronized in the CU, paragraph [0020], page 3, lines 3-5);

It appears that the Examiner analogizes the CU master clock of Grimwood to a first symbol clock of claim 1 and analogizes the downstream clock of Grimwood to a second symbol clock of claim 1. Grimwood in FIG. 1 discloses that the CU master clock's frequency is multiplied by 4 (Grimwood FIG. 1, Element 12) and is used by a modulator (Grimwood FIG. 1, Element 18) to multiplex downstream data. Also the CU master clock (Grimwood FIG. 1, Element 10) is used by a synthesizer (Grimwood FIG. 1, Element 28) to generate a downstream carrier. A multiplier (Grimwood FIG. 1, Element 24) mixes the downstream data by the downstream carrier to be transmitted on a shared media (Grimwood Para. [0048]). Therefore, Grimwood uses the same CU master clock to generate a downstream carrier and merely multiplies the CU master clock by 4 to use in multiplexing the downstream data. However, this is not the same as *synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity*, as recited in claim 1, as amended.

Moreover, the Examiner alleges that "all clocks in both the RU and CU being synchronized in the CU, paragraph [0020], page 3, lines 3-5". Applicants respectfully disagree, and submit that Grimwood at paragraph [0020], lines 3-5 states:

...all clock and carrier information in both the RU and CU
being synchronized to one master clock in the CU.

This does not mean, as the Office Action appears to suggest, that the synchronization for both RU and CU is done in the CU. Applicants respectfully submit that such parsing of the sentence, apparently in an attempt to apply the terminating phrase "in the CU" to every preceding element of the sentence, is against the teaching of Grimwood as taught throughout

Grimwood. Rather, Applicants respectfully submit that the terminating phrase "in the CU" applies only to the "one master clock," meaning that clock and carrier information in both the RU and CU are synchronized to one master clock, wherein **the master clock is in the CU**. Applicants submit that the same parsing argument holds also for lines 2-4 of the abstract of Grimwood. The modifier "in the central unit" of the abstract applies only to the master clock, consistent with the entire teaching set forth in Grimwood. See, e.g., the explanation of Grimwood and the CU set forth above.

Second, Grimwood does not teach or suggest that the central entity (central unit) transmits two downstream signals, using two transmitters, to one or more remote devices, with the second transmission occurring after the first transmission has terminated. The claimed "first signal" and the claimed "second signal" include timing information based on the first and the second clocks, respectively (these two clocks were previously synchronized).

The Examiner, on page 4 of the Office Action, as best understood relies at least in part on FIGS. 13 and 24 of Grimwood to allegedly teach a second transmitter in the central entity to transmit a second signal:

upon termination of transmission of the first signal (Fig. 22, start/end of superframe) to the one or more remote devices (Fig. 7, (300, with the upstream and downstream clock sync (a first signal is not transmitted (termination); 302, process looks and waits (non transmission termination) for message (first signal) to arrive), transmitting a second signal (Fig. 7, 305, second message with timebased conversion factor) using a second transmitter in the central entity (Fig. 6, CMTS send (via second transmitter) message to RU in UCD from CU at Fig. 6, 262; Fig. 13, CMTS downstream management and control messages; Fig. 24, downstream messages to transmitter) to one or more remote devices,...

Applicants respectfully disagree, and submit that FIG. 13 of Grimwood is a block diagram for *an SCDMA RU upstream transmitter* for use in an 802.14 or MCNS type

system (Grimwood Para. [0032]). The upstream transmitter of FIG. 13 of Grimwood is in a remote unit (RU) and therefore is not the same as a second transmitter in the central entity (or central unit of Grimwood), as recited in claim 1.

Further, FIG. 24 of Grimwood is a block diagram of a *demultiplexing receiver* which can be used to receive multiplexed upstream or downstream data in an 802.14 or MCNS or other system and which is capable of ranging and training. Therefore, the receiver of FIG. 24 of Grimwood is not the same as a second transmitter in the central entity, as recited in claim 1 (Grimwood Para. [0045]).

Moreover, FIG. 2 of Grimwood discloses a block diagram of a system for synchronizing an SCDMA upstream to a downstream, showing only one modulator and transmitter in a downstream side of the central unit (CU).

Regarding FIG. 6 of Grimwood and the claimed second transmitter in the central entity, the Office Action alleges that the "CMTS sends (via [a] second transmitter) [a] message to RU in UCD from CU at Fig. 6, 262;...". Applicants respectfully submit that the allegation, as best understood, appears to fail to actually identify what feature of Grimwood is the second transmitter, and instead appears to merely include a bare parenthetical assertion that the CMTS sends (a message) *via a second transmitter*. Applicants respectfully submit that Grimwood fails to disclose, teach, or suggest the claimed second transmitter in the central entity. Although the Office Action accompanies the parenthetical assertion with various types of **messages** (UCD, downstream management and control messages, downstream messages to transmitter), Applicants respectfully submit that such messages are merely sent via Grimwood's downstream transmitter, and such messages are distinctly different from a second transmitter in the central entity, which Grimwood fails to disclose. Applicants further note that the CMTS of FIG. 6 in Grimwood, as cited in the Office Action, is also not a second transmitter in the central entity, because it is merely another name for

Grimwood's central unit (CU), as set forth in paragraph [0106] line 1 of Grimwood.

Similarly, the UCD cited in the Office Action is also not a second transmitter, because it is a management and control **message** which is sent downstream, as explained in paragraph [0106] lines 7-10 of Grimwood, and not a transmitter.

Because Grimwood does not teach or suggest each and every feature of independent claim 1, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent Claim 3

Independent claim 3 recites a method for *maintaining synchronization* in a communication system. The method comprises:

synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity;

transmitting a first signal using the first transmitter in the central entity to the one or more remote devices, wherein the first signal includes timing information based on the first symbol clock and data having a first forward error correction (FEC) alignment; and

upon termination of transmission of the first signal to the one or more remote devices, transmitting a second signal using the second transmitter in the central entity to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock and data having a second FEC alignment that is synchronized with the first FEC alignment.

Applicants maintain that Grimwood does not teach or suggest each and every feature of claim 3. For example, as similarly explained above regarding claim 1, Grimwood does not teach or suggest synchronizing a first symbol clock of **a first transmitter in the central entity** and a second symbol clock of **a second transmitter in the central entity**;...transmitting a second signal using the second transmitter in the central entity to the one or more remote devices upon termination of transmission of the first signal to the one or more remote devices, wherein the second signal includes timing information based on the

second symbol clock and data having a second FEC alignment that is synchronized with first FEC alignment. In order to maintain the synchronization between the central entity and one or more remote devices, claim 3 teaches transmitting two downstream signals, using two transmitters, where the second signal is transmitted if and when the first signal is terminated. The FEC alignments of these two signals are synchronized. Grimwood does not teach or suggest transmitting a second signal, using a second transmitter, upon termination of the first signal.

Since Grimwood does not teach or suggest each and every feature of independent claim 3, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 3 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent Claim 5

Independent claim 5 recites a method for *maintaining synchronization* in a communication system. The method comprises:

- synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity;
- transmitting a first signal using the first transmitter in the central entity to the one or more remote devices, wherein the first signal includes timing information based on the first symbol clock and data having a first forward error correction (FEC) alignment;
- generating a second signal that includes timing information based on the second symbol clock and data having a second forward error correction (FEC) alignment;
- transmitting calibration information relating to a difference between the first FEC alignment and the second FEC alignment to the one or more remote devices; and
- upon termination of transmission of the first signal to the one or more remote devices, transmitting the second signal using the second transmitter in the central entity to the one or more remote devices.

As explained above, claim 5 is not anticipated by Grimwood for at least the following reasons: (1) Grimwood does not teach or suggest synchronizing a first symbol clock of a **first**

transmitter in the central entity and a second symbol clock of **a second transmitter in the central entity**; (2) Grimwood does not teach or suggest transmitting calibration information relating to a difference between the first FEC alignment and the second FEC alignment to the one or more remote devices; and (3) Grimwood does not teach or suggest transmitting a second signal using a second transmitter in the central entity to the one or more remote devices upon termination of transmission of the first signal to the one or more remote devices, as similarly described above with respect to claim 1.

The Examiner, on page 7 of the Office Action, relies on Grimwood's FIGS. 9, 10, and 11, element 360 to allegedly show feature (2) noted above. The Grimwood arrangement calculates a sync adjustment in FEC frames and inserts timestamps in order to lower jitter (see Grimwood FIGS. 8, 9, 10, and 11). But Grimwood does not teach or suggest transmitting calibration information relating to a *difference* between FEC alignments of two different signals (transmitted from two different transmitter) to one or more remote devices as required by claim 5.

Since Grimwood does not teach or suggest each and every feature of independent claim 5, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 5 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Dependent Claims 6 and 7

Claims 6 and 7 depend from and further limit claim 5. They distinguish from Grimwood for at least the reasons set forth above with respect to claim 5 and further in view of their own features.

Accordingly, Applicants respectfully request that the rejection of claims 6 and 7 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent Claim 9

Applicants maintain that Grimwood does not teach or suggest each and every feature of claim 9. Independent claim 9 recites an apparatus in a communication system, the apparatus comprising:

a first downstream transmitter configured to transmit a first downstream signal to one or more remote devices, wherein the first downstream signal includes first timing information based on a first symbol clock of the first downstream transmitter;

a second downstream transmitter configured to transmit a second downstream signal to the one or more remote devices in response to the first downstream transmitter terminating transmission of the first downstream signal, wherein the second downstream signal includes second timing information based on a second symbol clock of the second downstream transmitter; and

a synchronization element configured to synchronize the first symbol clock and the second symbol clock.

Independent claim 9 is not anticipated by Grimwood for at least the reason that Grimwood does not teach or suggest an apparatus comprising **a second downstream transmitter** configured to transmit a second downstream signal to the one or more remote devices in response to the first downstream transmitter terminating, wherein the second downstream signal includes second timing information based on a second symbol clock of the second downstream transmitter. The apparatus of claim 9 comprises **two downstream transmitters**, a first downstream transmitter configured to transmit a first downstream signal to one or more remote devices and a second downstream transmitter configured to transmit a second downstream signal to one or more remote devices. The Grimwood arrangement has *one (downstream) transmitter* in the central unit (CU) transmitting a *downstream signal* and *one (upstream) transmitter* in the remote unit (RU) transmitting an *upstream signal*. For example, see FIG. 4 of Grimwood illustrating "DOWNSTREAM→" and "←UPSTREAM." Therefore, Grimwood does not teach or suggest a **second downstream** transmitter that

transmits a second downstream signal if and when the first downstream transmitter terminates transmission.

Moreover, the Examiner, on pages 8 and 9 of the Office Action, analogizes a first downstream transmitter of the instant application to Fig. 13 of Grimwood.

a first downstream transmitter (downstream transmission (transmitter) from the CU to the RUs, paragraph [0004], page 1, lines 1-2) (Fig. 13, transmitter is intended to operate in the CU upstream or downstream, paragraph [0220], page 22, lines 7-9)...

Also, the Examiner, on page 9 of the Office Action, attempts to analogize a second downstream transmitter of the instant application to a pilot channel data transmitted during timeslot 0 in Grimwood, paragraph [0004].

a second downstream transmitter (pilot channel data transmitted (transmitter) during timeslot 0 in the downstream from the CU, paragraph [0004], page 1, lines 8-10) adapted to transmit a second downstream signal (pilot channel data transmitted (transmitter) during timeslot 0 in the downstream from the CU, paragraph [0004], page 1, lines 8-10) to the one or more remote devices ...

Applicants respectfully disagree. The portions of Grimwood cited by the Examiner disclose that RUs can detect CU barker codes and therefore downstream frame boundaries from downstream data. RUs use downstream clocks encoded in the barker codes to synchronize to CU master clock. Also, known pilot channel data is transmitted during timeslot 0 in the downstream for carrier recovery and monitoring frame synchronization. However, Applicants respectfully submit that Grimwood fails to disclose or suggest the use of first and second transmitters, and that there is no teaching or suggestion in Grimwood that the barker codes or the known pilot channel data are transmitted from the CU to the RUs using different transmitters. Moreover, as mentioned above with regard to claim 1, the block diagram of a system for synchronizing upstream to a downstream disclosed in FIG 2. of

Grimwood shows only one modulator and transmitter in the downstream part of the central unit (CU) and not **first and second downstream transmitters**, as recited in claim 9.

Since Grimwood does not teach or suggest each and every feature of independent claim 9, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 9 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Dependent Claims 10-11

Claims 10-11 depend from and further limit claim 9. They distinguish from Grimwood for at least the reasons set forth above with respect to claim 9 and further in view of their own features.

Also, Applicants assert the dependent claim 10 is patentable over the applied reference in view of its additional combinations of distinguishing features. For example, the feature recited in claim 10, that "the first downstream transmitter transmits a notification message to the one or more remote devices indicating that the first downstream signal will be terminated prior to the termination of transmission of the first downstream signal," is not explicitly or implicitly taught or suggested by Grimwood. The Examiner, on page 10 of the Office Action, relies on Figure 6 and paragraph [0014] of Grimwood to allegedly show this feature. Grimwood discloses that timestamp messages are normally sent in downstream to establish reference to the CU master clock. However, Grimwood does not teach or suggest the first downstream transmitter transmits a *notification message* to the one or more remote devices indicating *that the first downstream signal will be terminated* prior to the termination of transmission of the first downstream signal, as recited in claim 10.

Accordingly, Applicants respectfully request that the rejection of claims 10-11 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent Claim 12

Claim 12 reads:

a first downstream transmitter configured to transmit a first downstream signal to one or more remote devices, wherein the first downstream signal includes first timing information based on a first symbol clock of the first downstream transmitter and first data having a first forward error correction (FEC) alignment;

a second downstream transmitter configured to transmit a second downstream signal to the one or more remote devices in response to the first downstream transmitter terminating transmission of the first downstream signal, wherein the second downstream signal includes second timing information based on a second symbol clock of the second downstream transmitter and second data having a second FEC alignment that is synchronized with the first FEC alignment; and

a synchronization element configured to synchronize the first symbol clock and the second symbol clock.

Claim 12 is not anticipated by Grimwood for at least the reason that Grimwood does not teach or suggest an apparatus having *two downstream transmitters*, as explained above regarding claim 9, where the second downstream transmitter transmits a second downstream signal to a remote device if and when the first downstream transmitter terminates transmission of the first downstream signal, and where the second downstream signal includes second timing information based on a second symbol clock and second data having a second FEC alignment that is synchronized with the first FEC alignment.

Since Grimwood (Grimwood structure explained above) does not teach or suggest each and every feature of independent claim 12, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 12 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Dependent Claims 13-14

Claims 13-14 depend from and further limit claim 12. They distinguish from Grimwood for at least the reasons set forth above with respect to claim 12 and further in view of their own features.

Also, Applicants assert the dependent claim 13 is patentable over the applied reference in view of its additional combinations of distinguishing features. For example, the "the first downstream transmitter transmits a notification message to the one or more remote devices indicating that the first downstream signal will be terminated prior to the termination of transmission of the first downstream signal" feature recited in claim 13, is not explicitly or implicitly taught or suggested by Grimwood. The Examiner, on page 6 of the Office Action, relies on Figure 6 and paragraph [0014] of Grimwood to allegedly show this feature. Grimwood discloses that timestamp messages are normally sent in downstream to establish reference to the CU master clock. However, Grimwood does not teach or suggest the first downstream transmitter transmits a *notification message* to the one or more remote devices indicating *that the first downstream signal will be terminated* prior to the termination of transmission of the first downstream signal, as recited in claim 13.

Accordingly, Applicants respectfully request that the rejection of claim 2 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Independent Claim 15

Claim 15 reads:

An apparatus in a communication system, the apparatus comprising:

a first downstream transmitter configured to transmit a first downstream signal to one or more remote devices, wherein the first downstream signal includes first timing information based on a first symbol clock of the first downstream transmitter and first data having a first forward error correction (FEC) alignment;

a second downstream transmitter configured to transmit a second downstream signal to the one or more remote devices in response to the first downstream transmitter terminating transmission of the first downstream signal, wherein the second downstream signal includes second timing information based on a second symbol clock of the second downstream transmitter and second data having a second FEC alignment;
and

a synchronization element configured to synchronize the first symbol clock and the second symbol clock;
wherein at least one of the first downstream transmitter and the second downstream transmitter is adapted to transmit calibration information relating to a difference between the first FEC alignment and the second FEC alignment to the one or more remote devices.

Claim 15 is not anticipated by Grimwood for at least the reasons that Grimwood does not teach or suggest (1) an apparatus comprising **two downstream transmitters** where "a second downstream transmitter configured to transmit a second downstream signal to the one or more remote devices in response to the first downstream transmitter terminating transmission of the first downstream signal, wherein the second downstream signal includes second timing information based on a second symbol clock of the second downstream transmitter and second data having a second FEC alignment," and (2) "wherein at least one of the first downstream transmitter and the second downstream transmitter is adapted to transmit calibration information relating to a difference between the first FEC alignment and the second FEC alignment to the one or more remote devices."

Because Grimwood (see explanation of Grimwood as set forth above regarding claims 9 and 12) does not teach or suggest each and every feature of independent claim 15, it cannot anticipate that claim. Accordingly, Applicants respectfully request that the rejection of claim 15 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Dependent Claims 16-19

Claims 16-19 depend from and further limit claim 15. They distinguish from Grimwood for at least the reasons set forth above with respect to claim 15 and further in view of their own features.

Also, Applicants assert the dependent claim 18 is patentable over the applied reference in view of its additional combinations of distinguishing features. For example, the "the first downstream transmitter transmits a notification message to the one or more remote

devices indicating that the first downstream signal will be terminated prior to the termination of transmission of the first downstream signal" feature recited in claim 18, is not explicitly or implicitly taught or suggested by Grimwood. The Examiner, on page 6 of the Office Action, relies on Figure 6 and paragraph [0014] of Grimwood to allegedly show this feature.

Grimwood discloses that timestamp messages are normally sent in downstream to establish reference to the CU master clock. However, Grimwood does not teach or suggest the first downstream transmitter transmits a *notification message* to the one or more remote devices indicating *that the first downstream signal will be terminated* prior to the termination of transmission of the first downstream signal, as recited in claim 18.

Accordingly, Applicants respectfully request that the rejection of claims 16-19 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 103

The Examiner rejected claims 2, 4, and 8 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Grimwood in view of U.S. Patent No. 6,539,050 to Lee *at al.* ("Lee"). For the reasons set forth below, Applicants respectfully traverse.

Dependent Claim 2

Claim 2 is a dependent claim and necessarily includes all features of the independent claim 1. As discussed above, Grimwood fails to disclose all features of claim 1, and further Lee fails to cure the deficiencies of Grimwood noted above. Lee does not teach what is missing from Grimwood because Lee is merely directed to transmitting wideband signals via a narrow band communication system. For example, Lee fails to disclose, teach, or suggest synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity; upon termination of transmission of the first signal to the one or more remote devices, transmitting a second signal using the

second transmitter in the central entity to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock which is disclosed in claim 1. Therefore, claim 2 is patentable over Grimwood and Lee taken alone or in combination for at least the reasons provided above.

Accordingly, Applicants respectfully request that the rejection of claim 2 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Dependent Claim 4

Claim 4 is a dependent claim and necessarily includes all features of the independent claim 3. As discussed above, Grimwood fails to disclose all features of claim 3, and further Lee fails to cure the deficiencies of Grimwood as noted above. Lee does not teach what is missing from Grimwood, for example synchronizing a first symbol clock of a first transmitter in the central entity and a second symbol clock of a second transmitter in the central entity;...transmitting a second signal using the second transmitter in the central entity to the one or more remote devices upon termination of transmission of the first signal to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock and data having a second FEC alignment that is synchronized with first FEC alignment which is disclosed in claim 3. Therefore, claim 4 is patentable over Grimwood and Lee taken alone or in combination for at least the reasons provided above.

Accordingly, Applicants respectfully request that the rejection of claim 4 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Dependent Claim 8

Claim 8 is a dependent claim and necessarily includes all features of the independent claim 5. As discussed above, Grimwood fails to disclose all features of claim 5, and further Lee fails to cure the deficiencies of Grimwood as noted above. Lee does not teach what is missing from Grimwood, for example synchronizing a first symbol clock of a first transmitter

in the central entity and a second symbol clock of a second transmitter in the central entity;...transmitting a second signal using the second transmitter in the central entity to the one or more remote devices upon termination of transmission of the first signal to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock and data having a second FEC alignment that is synchronized with first FEC alignment which is disclosed in claim 5. Therefore, claim 8 is patentable over Grimwood and Lee taken alone or in combination for at least the reasons provided above.

Accordingly, Applicants respectfully request that the rejection of claim 8 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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